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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,416

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Seiichi Murakami

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EXAMINER

JOSEPH, DENNIS P

ART UNIT

PAPER NUMBER

2629

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,416	Applicant(s) MURAKAMI, SEIICHI	
	Examiner DENNIS P. JOSEPH	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendments filed for No. 10/568,416 on October 25, 2010. Claims 1-6 and 8-11 are pending and have been examined.

Continued Examination

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 25, 2010 has been entered.

Claim Objections

3. **Claim 1** objected to because of the following informalities: It recites therein, in the third paragraph, "so as to sandwich a periphery of the transparent first substrate so as to sandwich a periphery of the transparent first substrate". Respectfully, this seems like the same limitation was repeated twice and it doesn't seem to be necessary. Furthermore, it seems some of the changed limitations have not been underlined or crossed through and examiner would appreciate it if was marked as such. Appropriate clarification is required, thank you.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1-6 and 8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukio (JP 2002-259054) in view of Mikio (JP 2001-092594 Please note the Yukio reference is an art described in the background of the present invention and is described in Figure 7. Also, the Mikio reference is provided in the IDS.

Yukio teaches in Claim 1:

A transparent touch panel comprising:

a transparent first substrate (**Drawing 2, substrate 130, [0017] discloses a glass material**) and a second substrate (**Drawing 2, substrate 110**) each having a transparent electro-conductive layer on one surface thereof (**Drawing 2, [0016]-[0017] shows electro-conductive layers 111 and 131**), the transparent first substrate and the second substrate being arranged with a predetermined interval between each other in such a manner that the transparent electro-conductive layers are facing each other (**Drawing 2 shows the interval between them.**

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Also please note spacers 160), each transparent electro-conductive layer including a respective pair of electrodes disposed on each end (Drawing 2, [0016]-[0019], please note electrodes 112 (on each end) for the substrate 110 and electrodes 132 (on each end) for the substrate 130 as well)

a plurality of lead-out terminals being connected to the electrodes through surrounding circuits extending to the peripheral edges of the first substrate and the second substrate, the lead-out terminals each being arranged on the opposing surfaces of the first substrate and the second substrate (Drawing 2, [0016]-[0019], shows peripheral terminals 114 (read as lead-out terminals) on the substrate 110 and terminals 134 on the substrate 130. Also please note the wiring connecting them to the terminals, notably circuit pattern 113 (read as surrounding circuits). Drawing 2 further shows that the terminals are arranged on opposing surfaces facing each other, so that they can be bonded together); but

Yukio does not explicitly teach of “a plurality of holding members that pinch a peripheral edge of only the transparent first substrate so as to sandwich a periphery of the transparent first substrate, the holding member being formed of an electro-conductive material and arranged so that each holding member includes a portion inserted between the transparent first substrate and the second substrate and in contact with at least one respective lead-out terminal of either the first or second substrate.”

However, in the same field of endeavor, substrate structure, Mikio teaches of using a contact button 1 to cover one of the substrates, (Mikio, Drawing 1). Please note that [0012] notes the

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substrate can be glass and is pinched by the button. [0018] discloses the button should be designed to have conductivity and [0025] goes into more details on the conduction of the contact button. As for the plurality of such a button, duplication of parts is covered under KSR principles and case law (see in re Harza, USPQ 378 (CCPA 1960)) which notes the mere duplication of parts is not an inventive step. One of ordinary skill would realize that multiple buttons be used to sandwich other parts of the substrate for the benefit of further compression. Furthermore, the buttons of Mikio can be used to pinch just one of Yukio's substrates, such as pinching the glass substrate, and to be connected with the terminals of Yukio. To emphasize on this, [0011], [0013], etc, disclose of a signal drawer circuit attached to the contact button. Several KSR principles can be applied here, such as well known technique (clips/buttons on the ends of substrates are well known to pinch the substrate leading to a more compact structure), simple substitution of parts (given the button can be easily implemented in Yukio along the periphery to connect the substrate to the terminals) and obvious to try (given that with the well known benefits and need for a more compact structure, one of ordinary skill would realize to pinch the substrate or minimize their space).

Therefore, it would be obvious to one of ordinary skill in the art, at the time of the invention, to implement the contact button, as taught by Mikio, with Yukio's substrate device, with the motivation of the KSR principles above and that by pinching/sandwiching the substrate, (Mikio, [0022]), the gap can be abbreviated, leading to a smaller unit. Furthermore, one of ordinary skill would realize the need for more compact structures and pinching the substrates would be geared towards that goal.

Yukio and Mikio teach in Claim 2:

The transparent touch panel according to claim 1, wherein the thickness of the portions of the holding members inserted between the transparent first substrate and the second substrate is 0.5 to 2 times the space between the transparent first substrate and the second substrate. (

Respectfully, this is an optimization issue and according to KSR principles and case law, a design choice. One of ordinary skill in the art would realize to design the thickness so that the buttons would be sufficient to fit around the substrate and to provide an adequate space between the two substrates. Please note that Yukio also has spacers to provide distancing between the two substrates, so it is an issue that is relevant to his invention as well that he seeks to address. Please note the combination to teach of the contact button, as taught by Mikio, for the same reasoning, to vary the thickness)

Yukio and Mikio teach in Claim 3:

The transparent touch panel according to claim 1, comprising notched portions formed in a portion of the second substrate which is in contact with the holding members. (**Yukio, Drawing 2, [0018] shows insert part 142, formed in the second substrate. Please note the combination with Mikio teaches to place the contact buttons in this region, with regards to the terminals 114 and 134)**

Yukio and Mikio teach in Claim 4:

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The transparent touch panel according to claim 1, wherein the transparent first substrate has a plurality of groove portions in the surface opposite to the surface on which the transparent electro-conductive layer is formed, and the holding members are held in groove portions. (

Respectfully, 3D molded substrates are well known in the art which can deform parts of the substrate and the combination of the two references teaches to use the buttons to firmly press the substrate(s), so having a molded substrate in which the buttons could form into would be obvious to one of ordinary skill in the art to allow for the buttons to further press down and with the motivation that the buttons would not come out easily and possibly damage the device entirely. Please note KSR principles such as known technique (substrates with recesses), obvious to try to yield predictable results (obvious to have to provide firm connection for the buttons since finding a secure connection is an issue in the art for these buttons) and simple substitution (having a molded substrate would not destroy Yukio))

Yukio teaches in Claim 5:

The transparent touch panel according to claim 1, wherein the transparent first substrate is a fixed substrate. (**[0002] of the present invention, which discloses the Yukio invention, notes that 130 is a fixed substrate. Also please note [0017] of Yukio)**

Yukio and Mikio teach in Claim 6:

An electronic apparatus comprising the transparent touch panel of claim 1 and a display apparatus including electrically-conductive connecting terminals, the transparent touch panel

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being disposed on a display surface side of the display apparatus, and the holding members being in direct contact with the connecting terminals, whereby the apparatus and the lead-out terminals are electrically coupled. (**Respectfully, it is obvious the transparent side is disposed on the display surface side of the touch panel, Drawing 2 of Yukio shows the terminals being electrically coupled by the circuit pattern 133 for receiving and sending display signals from the appropriate drivers and the combination with Mikio teaches to use the contact buttons with the terminals**)

Mikio teaches in Claim 8:

The transparent touch panel according to claim 1, wherein the holding member are U-shaped and an interior of the U overlaps the at least one peripheral edge of the transparent first substrate. (**Mikio, Drawing 1, shows an U-shaped button and the interior part covers the glass substrate**)

Yukio and Mikio teach in Claim 9:

The electronic apparatus according to claim 6, wherein the holding members are U-shaped (**Mikio, Drawing 1, shows an U-shaped button**), an interior of the U overlaps the at least one peripheral edge of the transparent first substrate (**Drawing 1 shows the interior covers the glass substrate**), and the connecting terminals are in direct contact with a leg of the U-shape. (**The combination with Yukio teaches to place the holding members over the terminals 114/134**)

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Mikio teaches in Claim 10:

The transparent touch panel according to claim 1, wherein the peripheral edge of the transparent first substrate is sandwiched between an upper-side surface and a lower-side surface of each holding member. (**Mikio, Drawing 1, shows the peripheral edge of glass substrate 2 is sandwiched between the upper and lower surfaces of the contact button**)

Yukio and Mikio teach in Claim 11:

The transparent touch panel according to claim 3, wherein a warp of the notched portions generates pressing force between the movable substrate and the holding members. (

Respectfully, the combination teaches to place the contact buttons over the terminals through the notched portions, please see Drawing 2 of Yukio and the 103 combination above. The buttons are designed to press the substrates from both ends, obviously creating a pressing force)

Response to Arguments

7. Applicant's arguments with respect to claim 1-6 and 8-11 have been considered but are respectfully moot in view of the new ground(s) of rejection.

Applicant is thanked for the interview to discuss the case and in light of it, to submit new amendments that better claimed the present invention. In light of these new amendments, the previous rejection has been removed and a new one has been given. Please note the Mikio reference, which was provided in the IDS, teaches of a contact button (read as holding members) which covers just one of substrates, the glass substrate in particular. In the interview, this feature

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of the present invention, the holding members being placed over just one of the substrates and specifically not the other, was emphasized and examiner feels the Mikio reference is a reasonable reference which at least suggests this feature.

As a result of the new grounds of rejection, Applicant's arguments are considered moot because the Takashi reference is no longer being used.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS P. JOSEPH whose telephone number is (571)270-1459. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander S. Beck/

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Supervisory Patent Examiner, Art Unit 2629

DJ